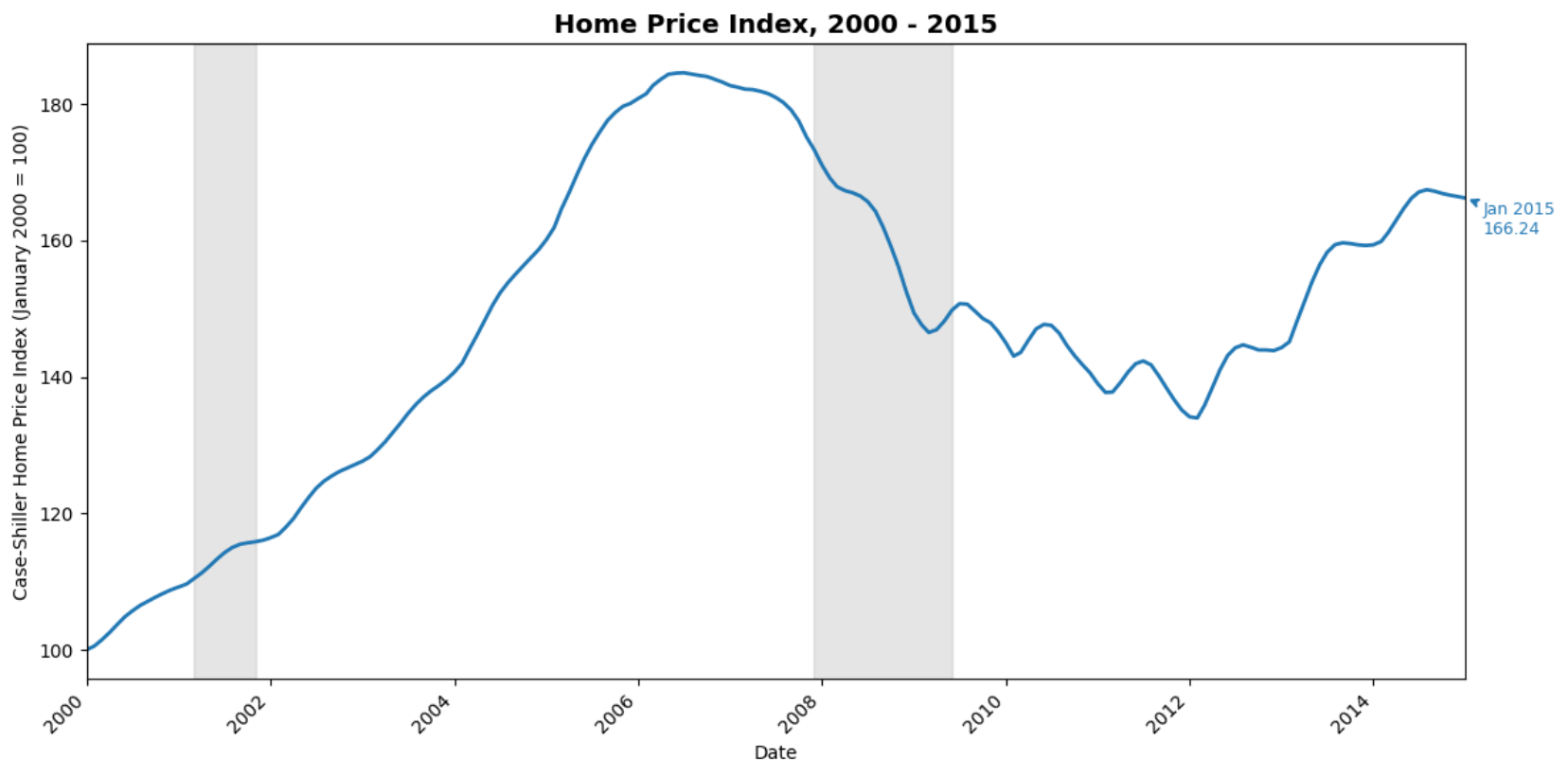

Econ 2
Principles of Macroeconomics
Lecture 18:
Aggregate Demand/Aggregate Supply

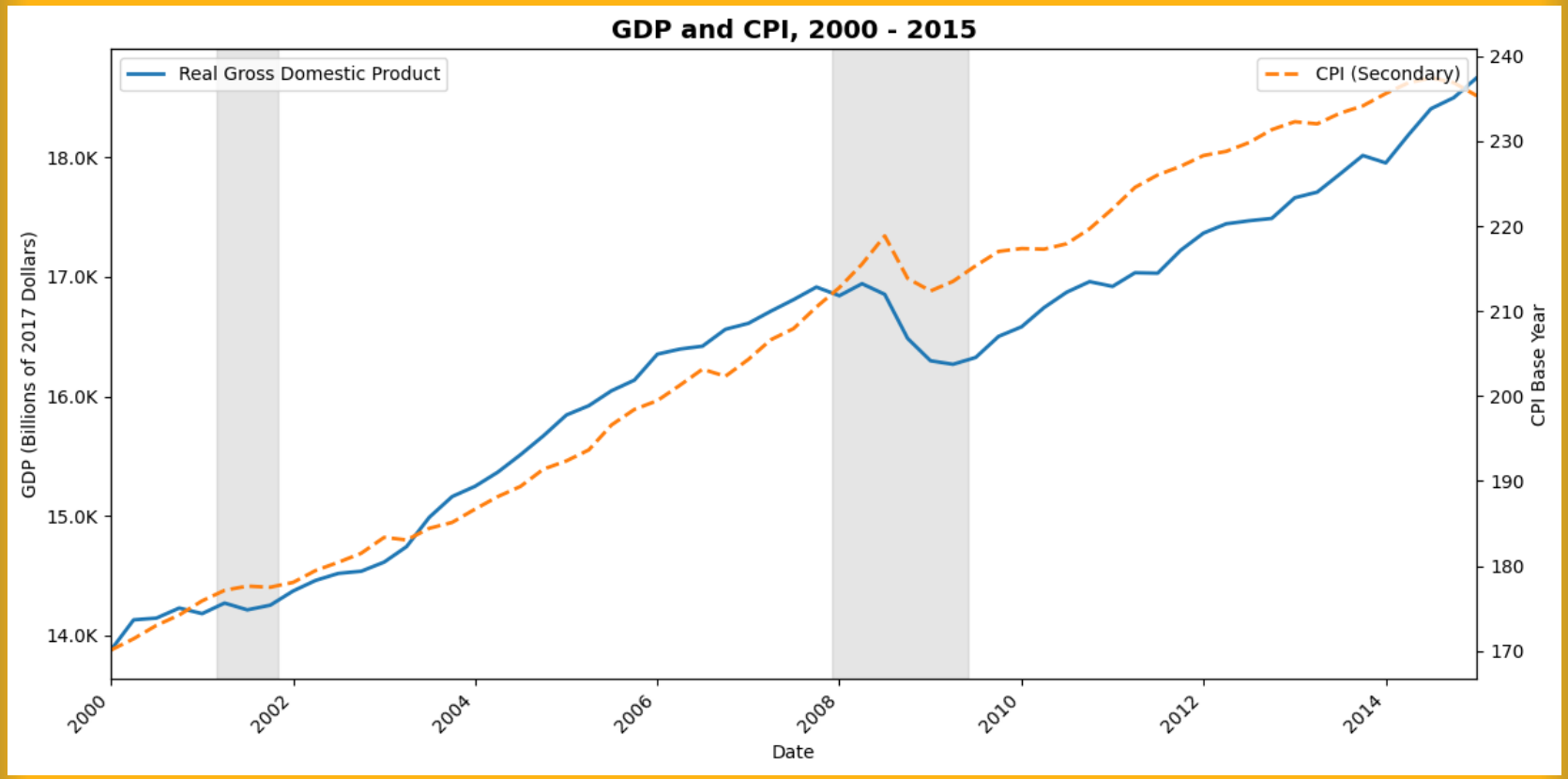
Shocks to the Macroeconomy

- Connect model to real-world data
- During the Great Recession, is there evidence that:
  - housing prices fell
  - output and CPI decreased
  - government spending increased
  - tax revenue decreased
  - interest rates decreased (money supply increased)

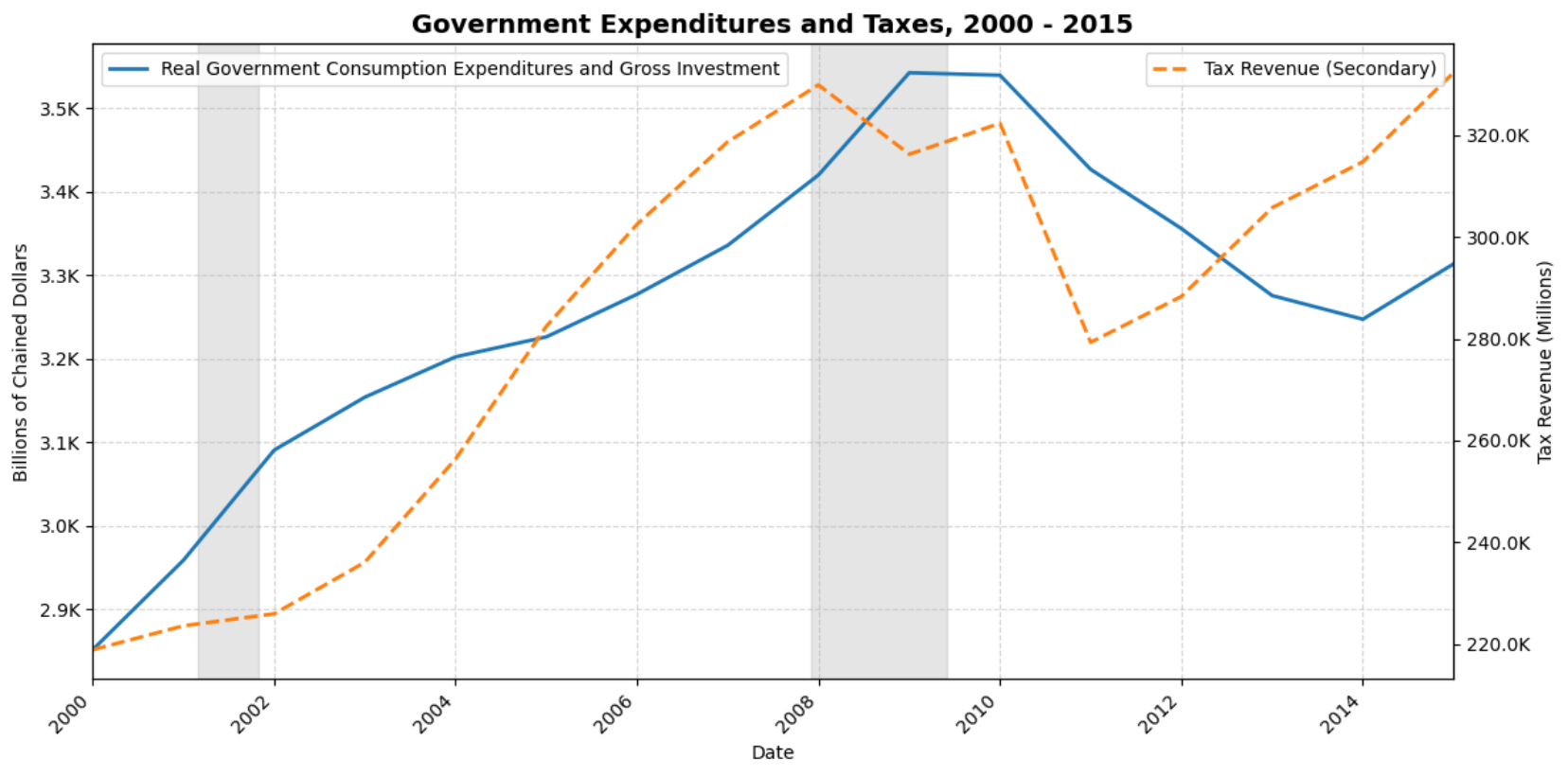
Housing Prices



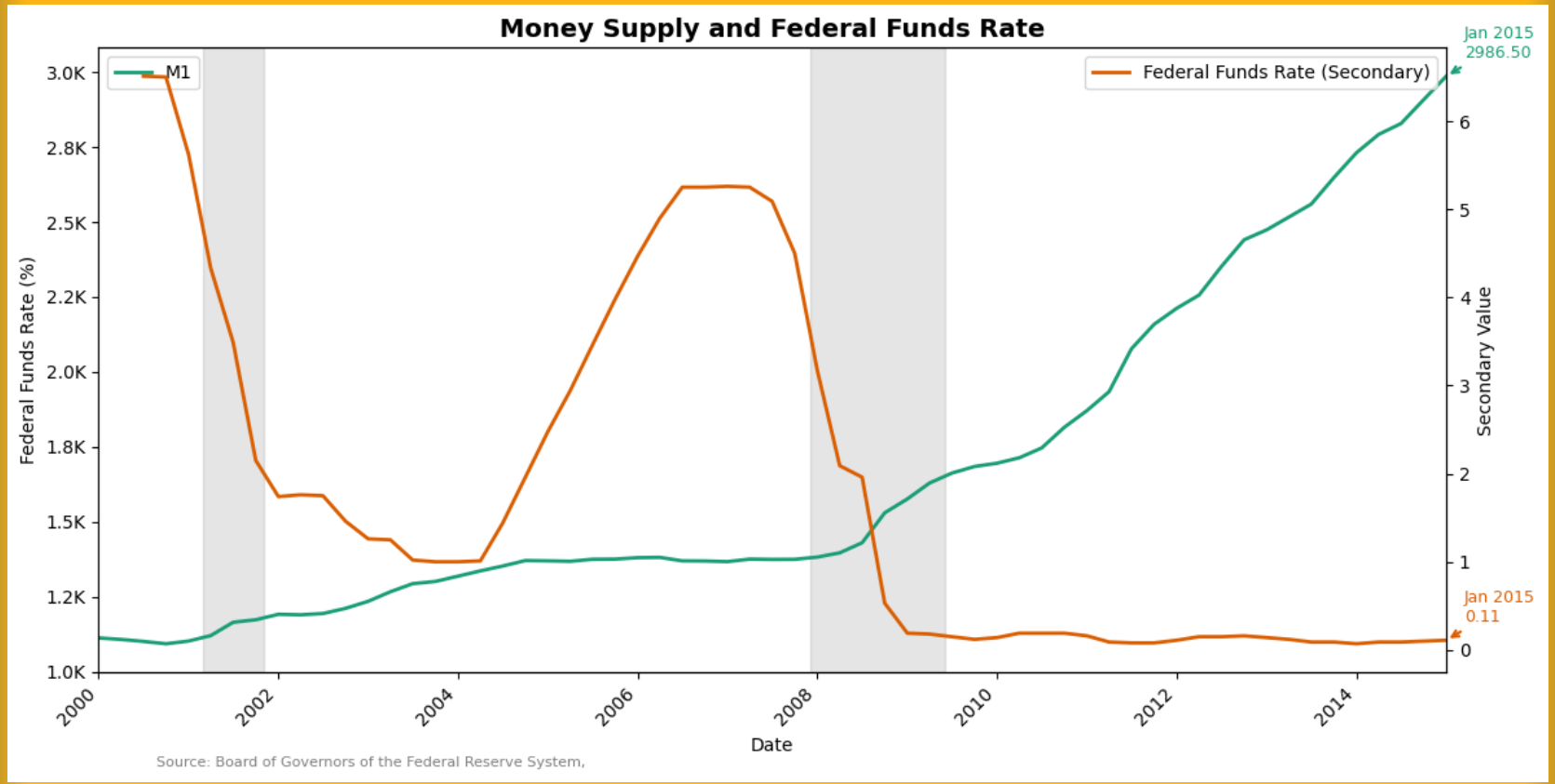
GDP/CPI


GDP and CPI, 2000 - 2015
Real Gross Domestic Product
CPI (Secondary)
GDP (Billions of 2017 Dollars)
CPI Base Year
18.0K
17.0K
16.0K
15.0K
14.0K
240
230
220
210
200
190
180
170
2000
2002
2004
2006
2008
2010
2012
2014
Date

Taxes and Government Expenditures



Interest Rate and Money Supply



Shocks to the Macroeconomy

- Start at Full-Employment output
- Covid-19 Pandemic: how do P* and Y* change?

Shocks to the Macroeconomy

- Start at Full-Employment output
- Covid-19 Pandemic: how do P* and Y* change?
- How should the government or Fed respond?

The Federal Reserve During COVID

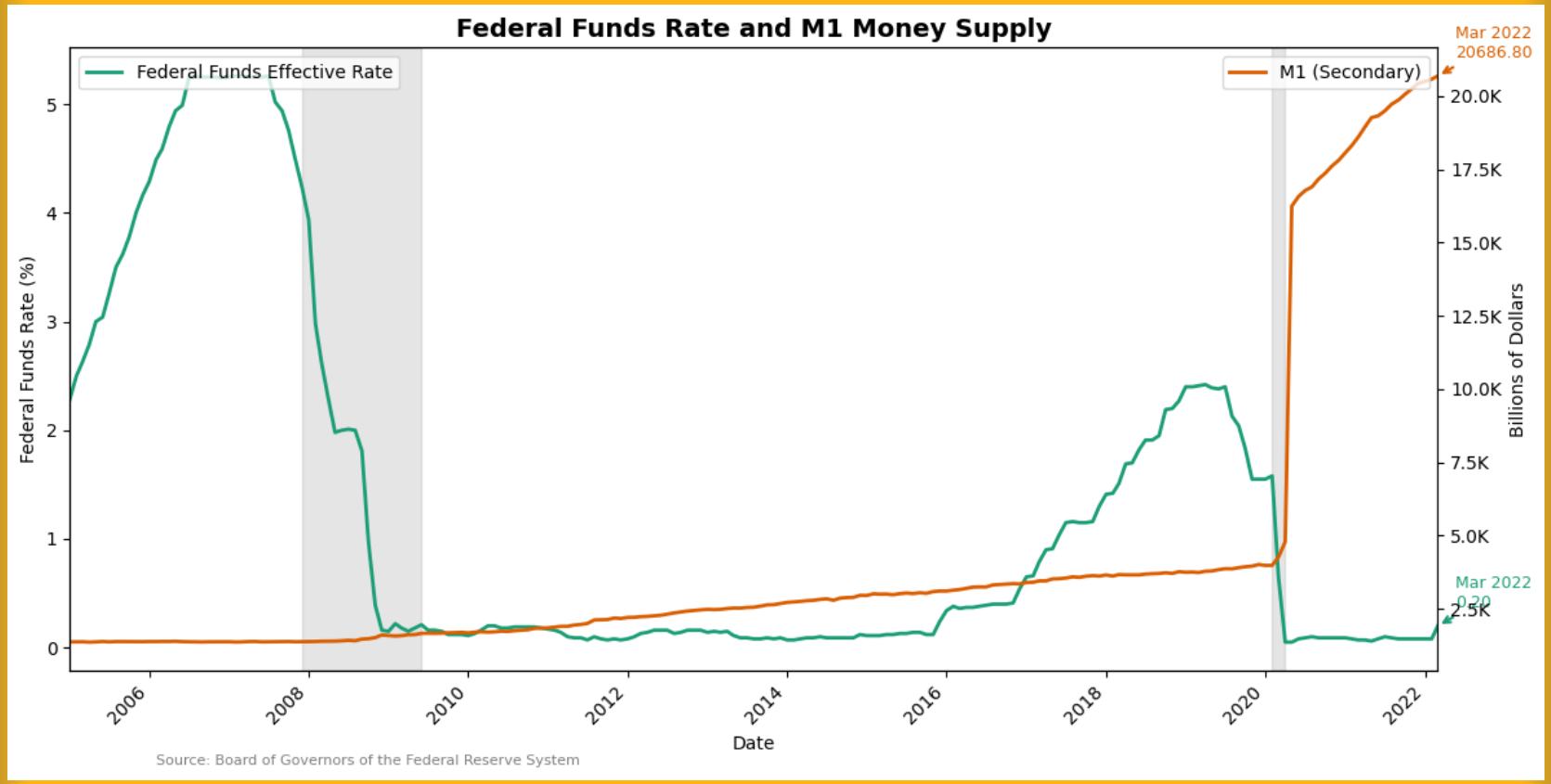
- Emergency Rate Cut I on March 3rd, 2020
  - Fed Funds Rate: 1.0 to 1.25%

- Emergency Rate Cut II on March 15th, 2020
  - Fed Funds Rate: 0 to 0.25%

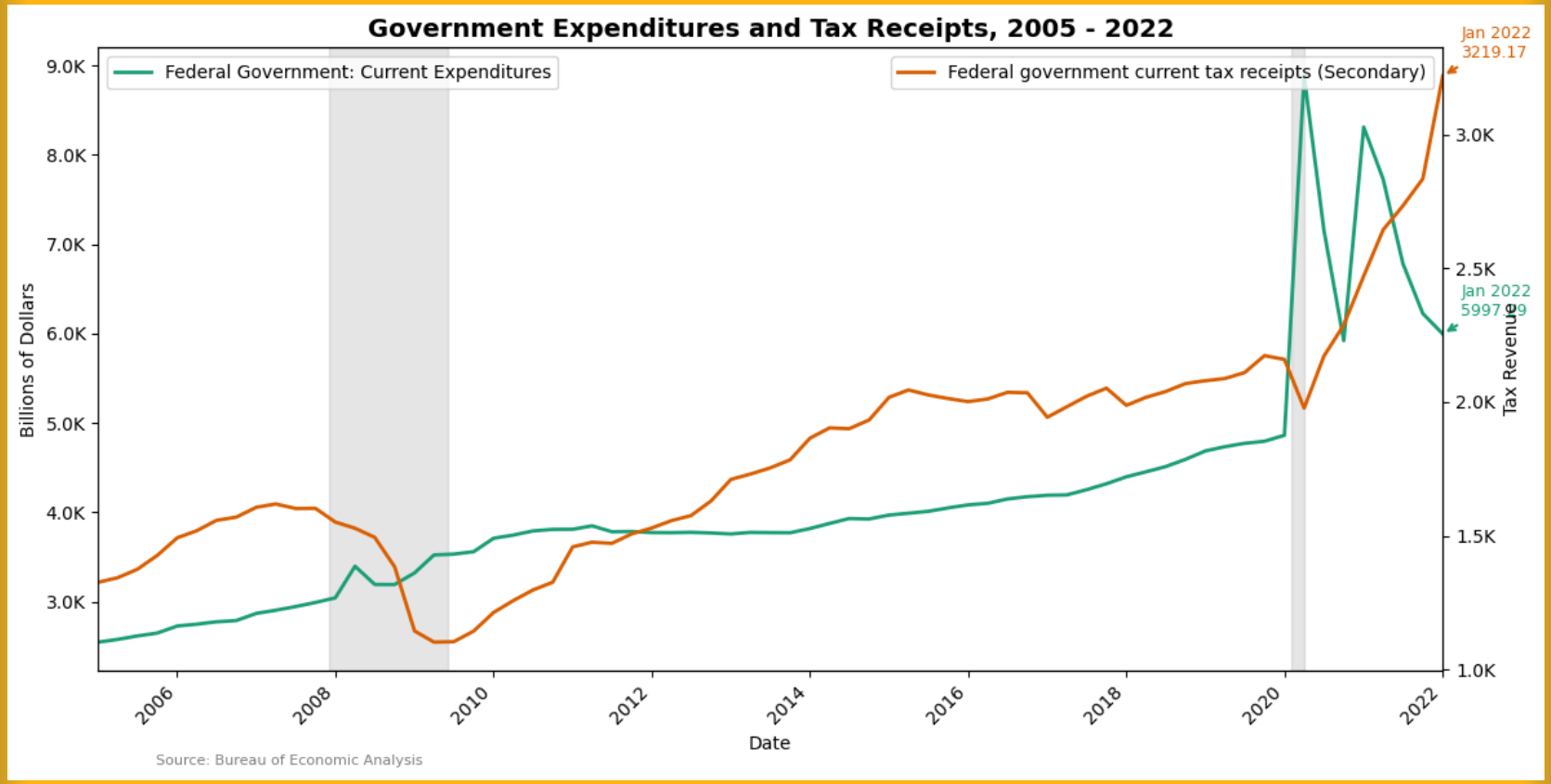
- Only unconventional tools remain
  - Buying mortgage-backed securities
  - Lower reserve requirements for banks

- All meant to increase AC, I^P

Federal Funds Rate and M1, 2005-2022



Government Expenditures and Taxes, 2005 - 2022



Demand Shocks to the Macroeconomy

- Demand Shock:

- Counter-Cyclical Policy:

Supply Shocks

- Supply Shock: Change in AS that moves economy away from full-employment equilibrium
- How do we know if a recession is caused by a supply shock instead of demand shock?

Supply Shock

- How should the government respond to a recession driven by a decrease in AS?
- Option 1: Fight unemployment, bring economy back to Y-bar

Supply Shock

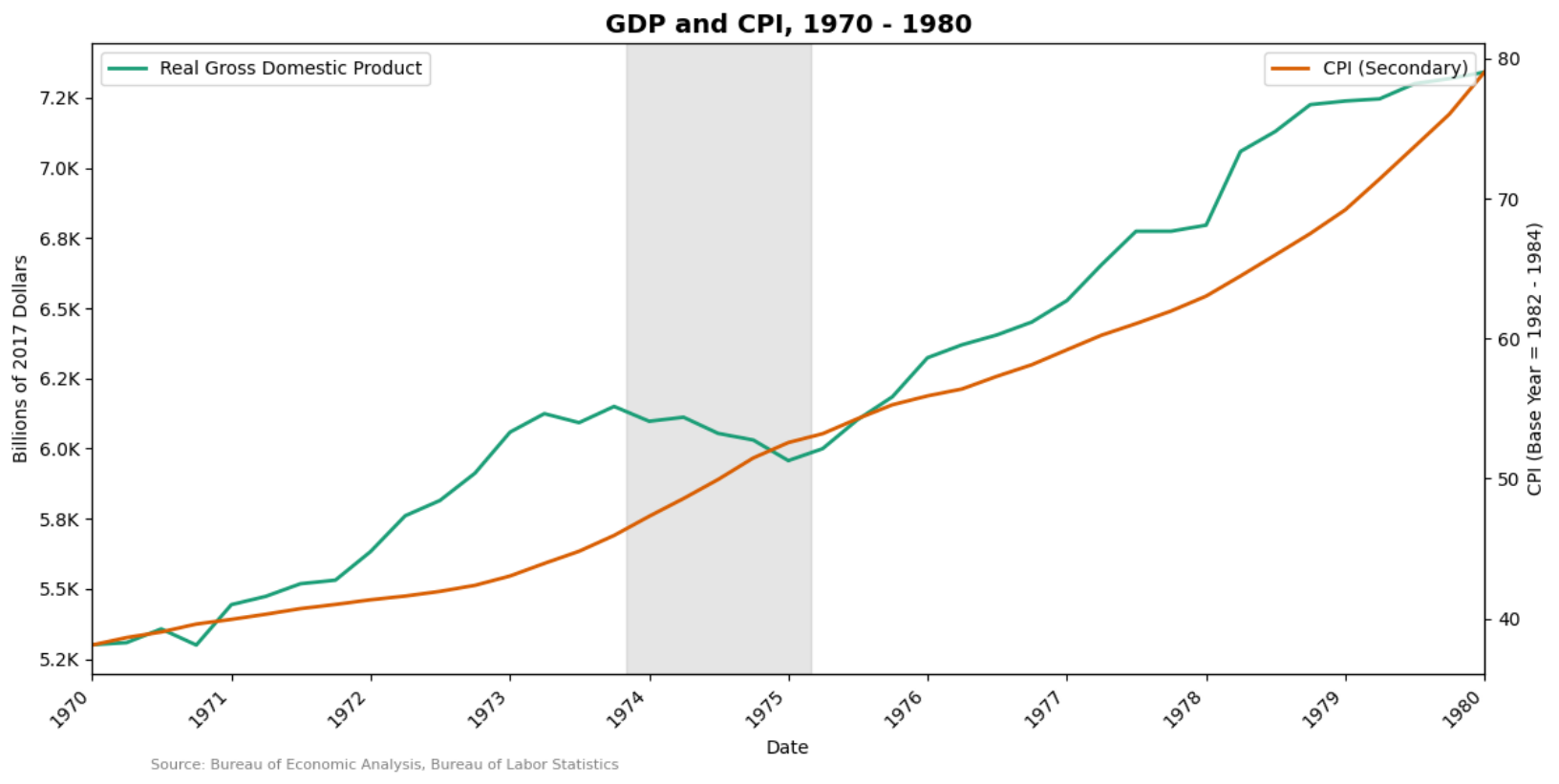
- How should the government respond to a recession driven by a decrease in AS?
- Option 2: Fight rising prices, bring prices back to P*

Historical Supply Shocks

- OPEC Oil Embargo in the early 1970s
- Microeconomic Consequences: Gasoline shortage

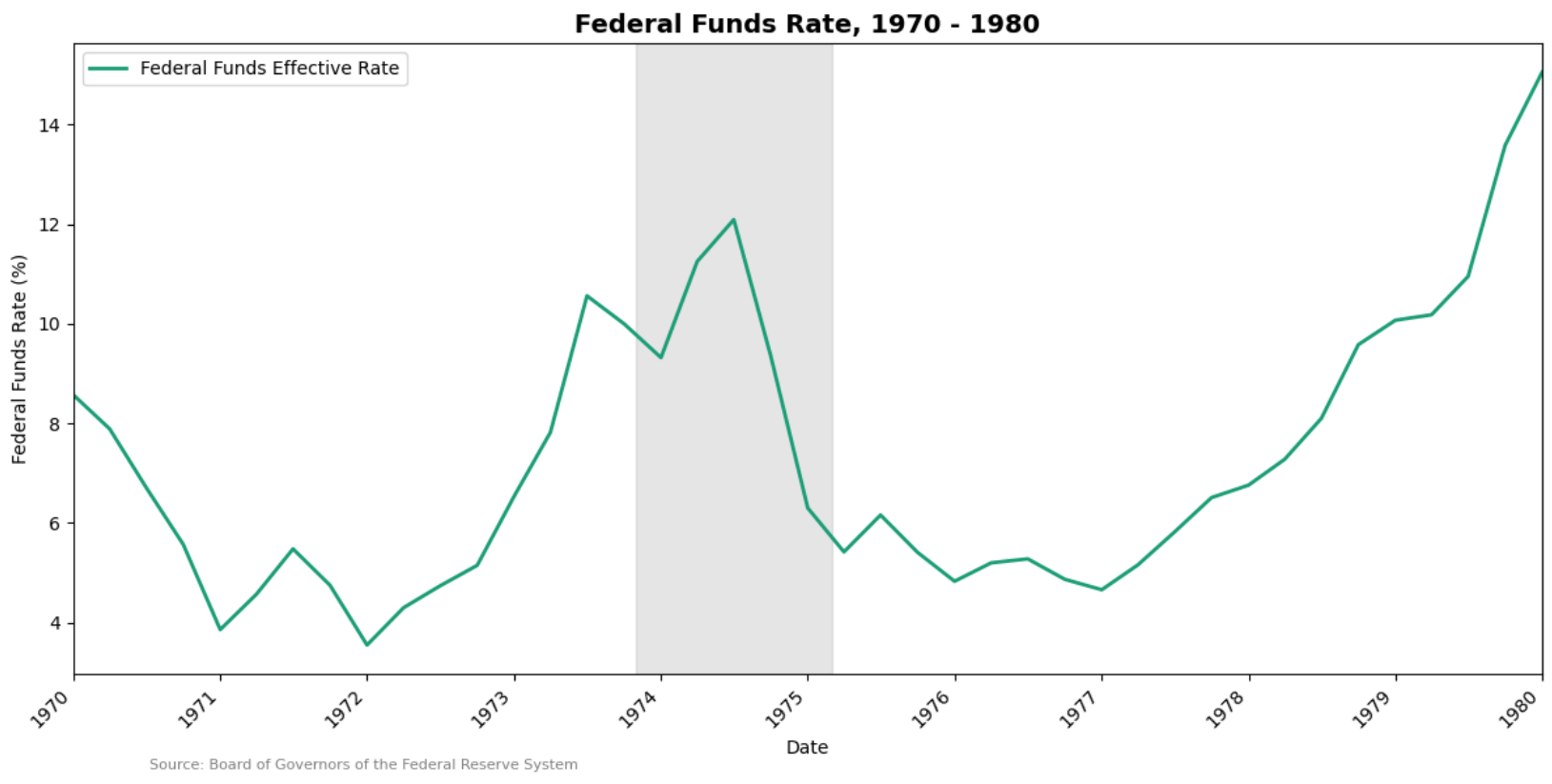
Historical Supply Shocks

- Did prices rise as output fell?

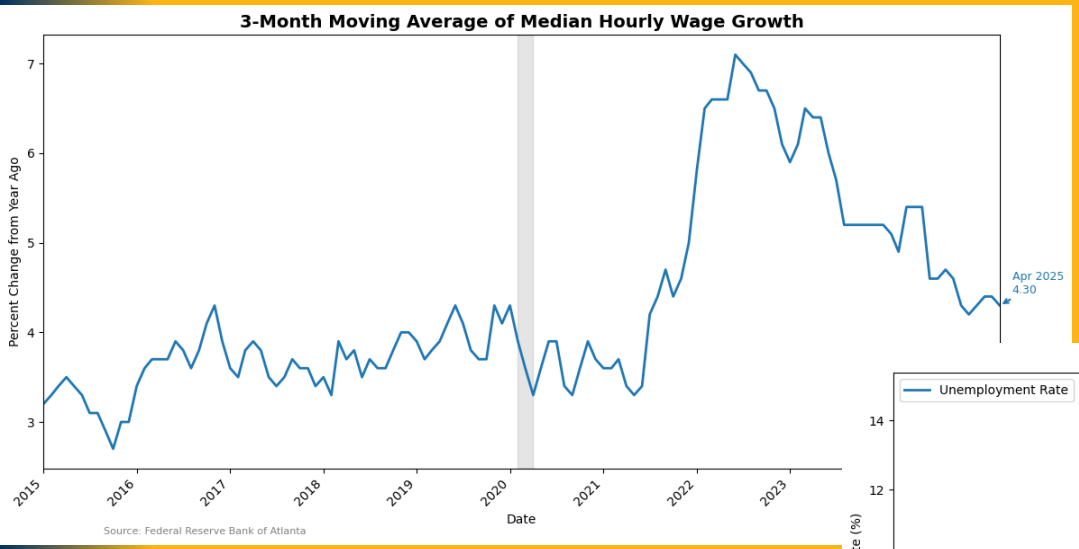


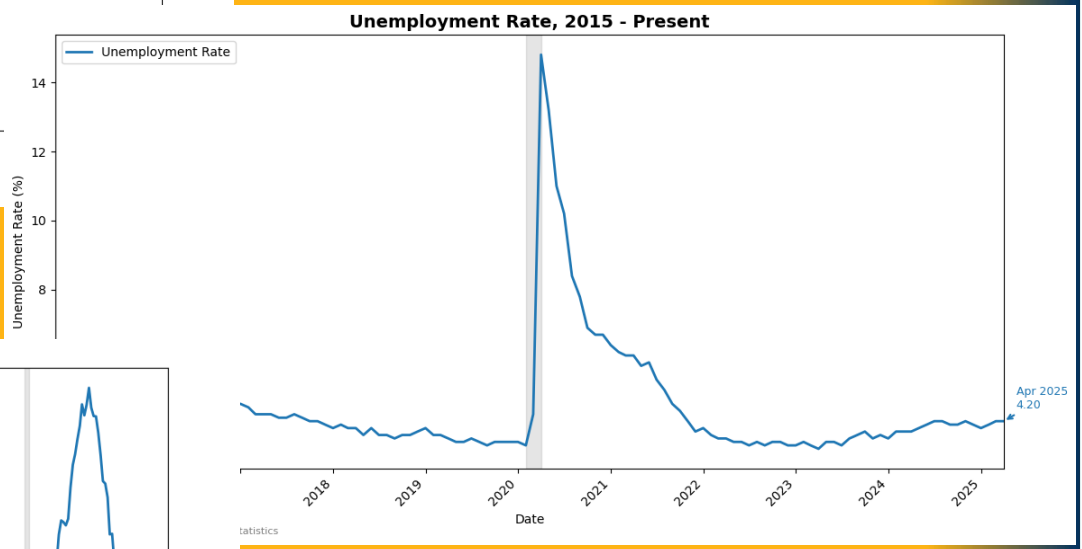
Historical Supply Shocks

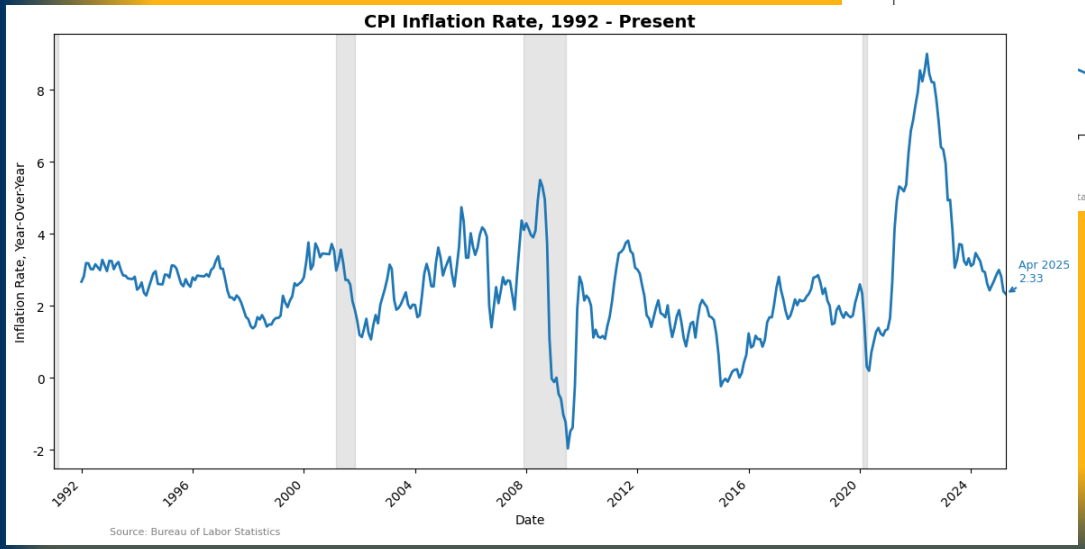
- How did the Federal Reserve respond?



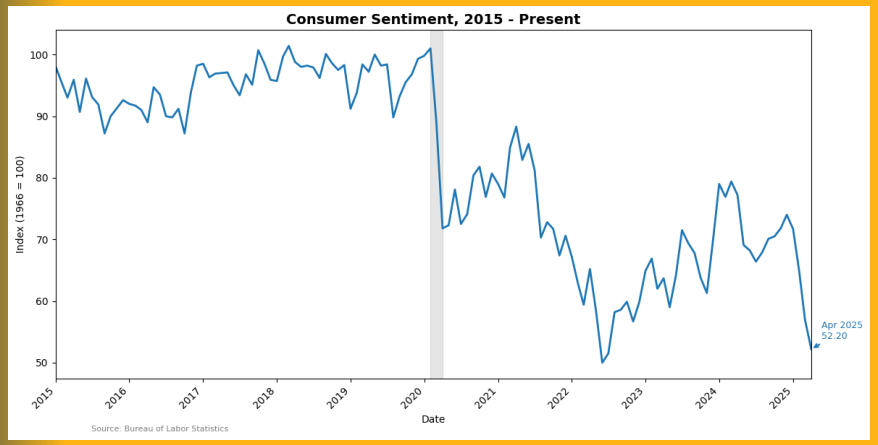
Federal Reserve Today

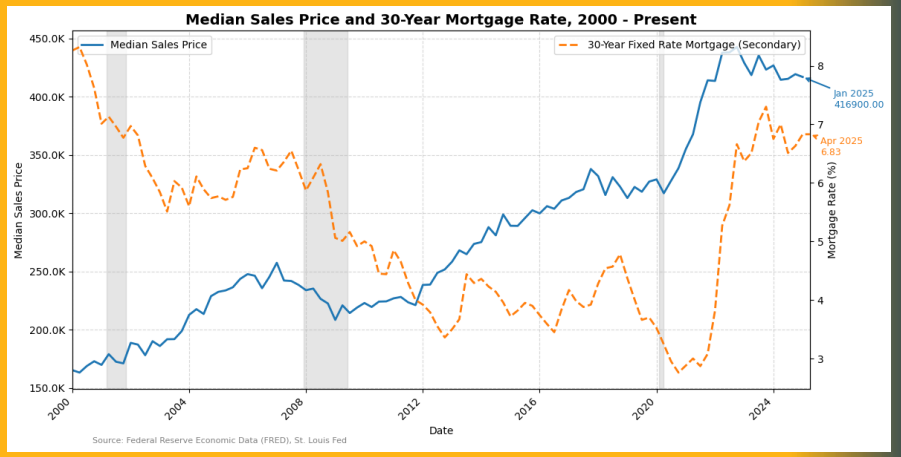






Federal Reserve Today





Committee *for a* Responsible Federal Budget

OUR WORK INTERACTIVES

Interest Costs Could Explode from High Rates and More Debt

MAY 20, 2025 | BUDGETS & PROJECTIONS

Interest costs are projected to approach $1 trillion this year, nearly triple 2020 levels. In light of current interest rates and the ongoing reconciliation negotiations, they are likely to more than double by the end of the decade.

Donald J. Trump
@realDonaldTrump

ADP NUMBER OUT!!! "Too Late" Powell must now LOWER THE RATE. He is unbelievable!!! Europe has lowered NINE TIMES!

ReTruths **156** Likes Jun 04, 2025, 8:21 AM

CNBC WATCH LIVE

ECONOMY

Private sector hiring rose by just 37,000 in May, the lowest in more than two years, ADP says

PUBLISHED WED, JUN 4 2025 8:15 AM EDT
UPDATED 42 MIN AGO

Jeff Cox
@JEFFCOXCNBCCOM
@JEFF.COX.7528

WATCH LIVE

Federal Reserve Today

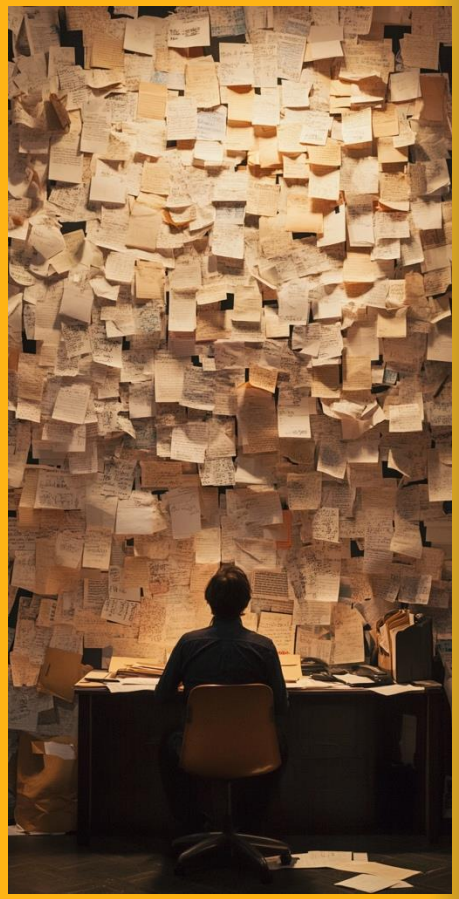
- Political and Economic Uncertainty
- Tariffs → inflationary?
- 2025 Q1 GDP → Negative, -0.2%
- Atlanta Fed Q2 GDP Prediction: 4.6% Growth!
- Forward-looking markets (S&P 500)
  - All Time High, Mid-February
  - Down 21% by Early-April
  - Mostly recovered, down ~3% from ATM
- Involuntary Part-Time Workers up from 3.6M (July 2022) to 4.7M (April 2025)

- What will they do at their meeting next week?
- What will they do by the end-of-the-year?

Housekeeping

- Final Exam: Tuesday, June 10th, 12 – 2:30pm
- 40 Questions, spread roughly even among topics
- Unless you have heard otherwise, you have full participation

- Indeed.com: apply, apply, apply!
- Evaluations



Topics for the Final Exam

Part 1 (Weeks 1 – 5)

- Supply and Demand (Chapter 2)
  - Gasoline Market (2.3, 2.4)
  - Housing Market (2.5)
- Course Goals (Chapter 3)
  - High Standard of Living (3.1)
    - Real vs. Nominal GDP
    - GDP Deflator Inflation Rate
  - Stable Prices (3.2)
    - CPI Inflation Rate
    - CPI vs. GDP Deflator
  - Unemployment Rate (3.3)
    - BLS Calculation
    - Involuntary Part-Time Workers
    - Discouraged Workers
    - Limitations

Part 2 (Weeks 5 – 10)

- Short-Run Equilibrium (Chapter 4)
  - Consumption Function (4.1)
  - Aggregate Expenditures (4.2)
  - Short-Run Equilibrium (4.3)
- Fiscal Policy (Chapter 5)
- Monetary Policy (Chapter 6)
  - Money Market (6.1, 6.2)
  - Monetary Policy (6.3)
- Agg. Demand/Agg. Supply (Chapter 7)
  - Agg. Demand/Agg. Supply (7.1)
  - Complete Equilibrium (7.2)
  - Policy Responses (7.3, 7.4)